

LAN Broadloom Installation Guidelines

General Guidelines

- The following installation guidelines as stated herein should be reviewed prior to installation. **SHAW will not be responsible for improper installation.**
- Be sure that other contractors, such as painters and masons have completed their work or take the necessary precautions before installation begins.
- The flooring contractor, general contractor or building owner must have the slab or concrete floor tested for the following: surface pH, moisture transmission rate, and subfloor conditions. The results must meet our test guidelines as stated below. SHAW will not be responsible for material installed with visible defects.

Storage and Handling

- **Storage:** Carpet shall be stored in flat bins to prevent pile crushing. Temporary storage shall be in flat bins with a maximum height not to exceed three rolls. Bending or folding of individual carpet rolls is not recommended.
- **Relax Carpet:** Whenever possible and conditions permit, all carpet shall be unrolled, relaxed, and allowed to ventilate with the induction of fresh air.

Site Testing and Conditioning

- The slab temperature, carpet tile and adhesive must be maintained at a minimum of 65° F for 48 hours before the installation and remain at the temperature and/or not rise above 90° F at any time during installation and 24 hours after the installation.
- The concrete must be tested for surface pH at several random points throughout the floor. The pH range necessary is 5-9. Otherwise, corrective action is required.
- The site must be tested for moisture randomly throughout the floor. The proper test procedure to measure moisture transmission is the Anhydrous Calcium Chloride Test run quantitatively. The maximum allowable amount of moisture transmission must not exceed 5.0 lbs./1,000 sq. ft. in 24 hours. This maximum threshold must hold true throughout the life of the product. Otherwise, corrective action is required.

Floor Preparation: General

- The floor must be clean and free of all foreign matter: grease, oil, paint, wax, dirt, dust, old adhesives or any material that might interfere with the overall bond strength of the adhesive. The floor should be sound and level. All holes, cracks, depressions or protrusions must be filled with a compatible latex patching compound, and then sealed with a latex liquid and allowed to dry.

- **Caution:** Cutback asphaltic adhesive must be completely and thoroughly removed. No traces can come in contact with the newly applied adhesive. Failure to do so will result in an installation failure.

Floor Preparation: Specific

Each subfloor shall be inspected to determine the special care required to make it a suitable foundation for carpet.

Concrete: New concrete must be clean, dry and cured for a minimum of 90 days and free of parting agents. Old concrete should be checked for moisture. Dry, dusty, porous floors must be sealed. Sealers will not correct a moisture problem.

Ceramic Tile and Terrazzo Floors: Ceramic tile must be solidly adhered. Any loose tile must be removed. Grout lines must be filled and leveled. Strict attention must be paid to the open time for adhesive to become permanently tacky.

VCT, Vinyl Tile and VAT: VCT Damaged tiles should be filled or replaced, and loose tiles re-glued. Patching compounds should be used to level any floor irregularities and waxes should be fully eliminated to ensure a proper bond. VAT should never be sanded or scraped without proper safety and handling precautions. Special care and precautions in accordance with state and local codes must be taken for asbestos tile abatement.

Other Resilient Flooring: Homogenous sheet vinyl and solid vinyl tile should be removed before installation.

Old Carpet: Remove old carpet adhesive.

Wood: Plywood, hardwood and particle board used as subflooring must be a flooring grade and installed to manufacturer's recommendations. Joints should be filled and any rough areas sanded smooth. Glossy surfaces need to be roughened prior to spreading the adhesives.

Site Conditions – Environment

- **Radiant Heat:** Heat must be lowered before the installation to prevent floor adhesive from “setting” too fast.
- **Sealers:** The use of sealers on floor surfaces is generally not necessary except for sanded, dusty, porous, and acoustical surfaces. Sealing cannot overcome moisture conditions and must not be used for that purpose. When used, sealers must be thin and fast drying. They should be compatible with adhesives, which should be applied only after sealer is dry.

Planning and layout

- **Seams:** Seams shall be kept to a minimum. The seams shall be positioned whenever possible when:
 - The seams run the length of the area.
 - Main traffic runs along the seam rather than across the seam.
 - Incident light does not strike across the seam.

- The seams are away from areas subject to pivoting traffic.
- Seams are not perpendicular to doorway openings.
- **Pile Direction:** Were two or more pieces of the same carpet are adjacent, the pile direction shall be the same as in other areas unless otherwise specified. Ideally, pile direction shall be toward the entrance, but other factors such as pattern, aesthetics, and economic use of material may also be considered.

Installation

- **Direct Glue-Down:** Direct glue-down adheres carpet to subfloors.
- **Layout:** Cut the carpet to the proper length and spread out in the area where it is to be installed. The carpet shall be cut three to four inches longer than the area measurement. Where applicable, also allow for pattern repeat. Align all breadths, or sections, of carpet in their proper position and trim the seams.
- **Adhesive:** SHAW recommends using a general purpose adhesive similar to SHAW SUBSET 1000 premium commercial grade floor covering adhesive for broadloom. Be sure to allow the proper amount of open time for the adhesive. If the carpet is laid into the adhesive while it is too wet, it will bubble and cause the seams to peak later.

Important - Use with sufficient ventilation.

Trowel Notch Size: SHAW recommends using a 1/8" square notch trowel. Because LAN Carpet backing is not smooth, adhesive must be applied liberally. A 100% transfer of the floor adhesive into the carpet backing while maintaining full coverage of the floor must be obtained.

After sufficient open time, the carpet shall be pressed into the adhesive and rolled. Do not exceed 75 lbs. A second rolling should be done 3-12 hours after initial rolling.

Warning: Lack of adhesion caused either by a lower quality adhesive or wrong trowel selection is the number one cause of installation failure. A 100% transfer of floor adhesive into the carpet backing, including the recesses of the carpet back, while maintaining full coverage of the floor must be attained.

Seam Sealer

It is important that a seam sealer be applied. We recommend using a seam cement such as W.F. Taylor #775 or equal. Please note that the tip of the nozzle of the applicator should be cut at about 60° angle when applying the seam sealer. Excess seam sealer should be cleaned from face fibers using an absorbent cloth immediately upon contact.

LAN Carpet Electrical Properties

LAN Carpet has been designed to provide an efficient conductive path-to-ground for static electricity occurring on the surface of the floor. The electrical resistance

range should be $2.5 \times 10^4 - 1.0 \times 10^9$ ohms based on NFPA 99.

Grounding: To properly ground the flooring, lay a 2" x 24" copper grounding strip under the carpet and extend the strip up the wall at least 6" to 8". The foil can be tapped into an exposed steel column or applicable building ground. If there is no accessible ground, prior to installation a certified electrician can tap into the electrical circuitry and drop a wire (no smaller than #10 stranded copper wire) inside a wall and cut a small hole in the baseboard so the wire can emerge. The stranded copper wire should be securely fastened to the copper grounding strip.

Grounding Frequency: SHAW recommends the copper grounding strips should be placed approximately 25' to 40' apart throughout the installation or to all accessible I-beams. A foil strip should be installed at least every 1,000 square feet.

Questions

Specific questions regarding installation and grounding issues not covered or in question should be referred to Shaw Installation Services at 800-471-7429, Monday – Friday between 8:00 am and 5:00 pm E.S.T. Any variances from these procedures are the responsibility of the installer.